December 22, 2011

Federal Communications Commission International Bureau LightSquared GPS Interference Issue

## LOUCKS ASSOCIATES

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## Dear Commission Members:

I am a 35-year Engineering & Surveying business owner in Minneapolis/St. Paul as well as a past and current Chairman of the Board of two of the largest Chambers of Commerce here in the Twin Cities.

I am writing in regard to the LightSquared proposed wireless broadband project. In our professions we utilize high precision GPS equipment every day, all day, in our work preparing for the design of infrastructure and the laying-out of all structures and infrastructure that are built.

I am told by both our state and national technical associations, who have studied this issue in great detail, that LightSquared's proposal has the potential to make our GPS equipment useless. I understand that.... According to LightSquared's own report, most High Precision GPS devices would be rendered useless by LightSquared's actions.

If that is true, or even partially true, this would be devastating to ALL CONSTRUCTION AND INFRASTRUCTURE PROJECTS IN THE COUNTRY. GPS technology is utilized and relied upon by virtually all surveyors in staking construction features. Highways, streets, utilities, commercial buildings, industrial plants, railroads, retail centers, housing buildings – all are prepared and staked for construction with GPS these days. If GPS could no longer be relied-upon as being accurate, due to this broadband interference, our profession's construction-related surveying procedures would be set back to where we were 10 to 15 years ago. Many firms, ours included, no longer equip our crews with all of the equipment we used prior to GPS for construction work. Being unable to rely upon GPS equipment would be devastatingly expensive. Our firm, for example, just replaced all of our GPS equipment with the latest models, since our original equipment purchased 10 years ago had become obsolete and no longer supported. This was at a cost of 20,000 dollars per crew. We could not afford to turn around and purchase another 20,000 dollars worth of non-GPS equipment for each crew to go back to how things were done 10 years ago! Besides that, our crew time to perform construction layout work would dramatically increase thereby increasing the cost of every construction project built. GPS has been a revolution for construction as well as many other surveying and engineering activities, in terms of accuracy, speed, accessibility and production.

It is hard for me to believe, frankly, that such a proposal would even be considered! The consequences in terms of disrupting, delaying and increasing the cost of construction projects across the entire country would be massive. I understand that there are alternatives for LightSquared, such as moving to a band that is not right next to that of high precision GPS. There is no question that the significant risk of GPS disruption is many magnitudes greater than requiring that LightSquared utilize an alternative band! I want to make clear that the GPS we are concerned about here is not folks out in their boats tracking their route or even the tracking of cars, trucks and emergency vehicles (also very important) but we are talking about disrupting the backbone of construction activities across the country.

Thank you very much, LOUCKS ASSOCIATES

Paul McGinley, PLS

Professional Land Surveyor Principle and Vice President